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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,994	11/20/2001	Qiang Liu	8325-0011.20	1661

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EXAMINER

CARLSON, KAREN C

ART UNIT	PAPER NUMBER
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1653

DATE MAILED: 12/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/989,994

**Applicant(s)**

LIU, QIANG

**Examiner**

Karen Cochrane Carlson, Ph.D.

**Art Unit**

1653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-49 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

Art Unit: 1653

Restriction to one of the following inventions is required under 35 U.S.C. 121:

1-45. Claims 1-46, drawn to polypeptide, classified in class 530, subclass 300+.

Claim 1 refers to at least 45 different sequences (therefore 45 different inventions) for the claimed zinc finger polypeptide. Applicants will choose one sequence for F1, one sequence for F2, and one sequence for F3 from the following table for examination. It will be understood that all three of the chosen F1, F2, and F3 sequences will be found in the same polypeptide.

Zinc Finger ->	F1	F2	F3
S1/S2/S3 = GAA	QRSNLVR	QSGNLAR	QSGNLAR
S1/S2/S3 = GAG	RSDNLAR	RSDNLAR	RSDNLTR
S1/S2/S3 = GAC	DRSNLTR	DRSNLTR	DRSNLTR
S1/S2/S3 = GAT	QSSNLAR	TSGNLVR	TSANLSR
S1/S2/S3 = GGA	QSGHLAR	QSGHLQR	QSGHLQR
S1/S2/S3 = GGG	RSDHLAR	RSDHLSR	RSDHLSR
S1/S2 = GGC	DRSHLRT	DRSHLAR	?
S1/S2/S3 = GGT	QSSHLTR	TSGHLSR	TSGHLVR
S1/S2/S3 = GCA	QSGSLTR	QSGDLTR	QSGDLTR
S1/S2/S3 = GCG	RSDDLTR	RSDDLQR	RSDDLTR
S1/S2/S3 = GCC	ERGTLAR	DRSDLTR	DRSDLTR
S1/S2/S3 = GCT	QSSDLTR	QSSDLTR	QSSDLQR
S1/S2 = GTA	QSGALTR	QSGALAR	?
S1/S2/S3 = GTG	RSDALTR	RSDALSR	RSDALTR
S1/S2/S3 = GTC	DRSATAR	DRSALAR	DRSALAR

46-90. Claims 47-49, drawn to polynucleotide encoding zinc finger polypeptide, classified in class 536, subclass 23.1.

Claim 1, from which claims 47-49 depend, refers to at least 45 different sequences (therefore 45 different inventions) for the claimed zinc finger polypeptide. Applicants will choose one polynucleotide sequence encoding the peptide sequence for F1, one polynucleotide sequence encoding the peptide sequence for F2, and one polynucleotide sequence encoding the peptide sequence for F3 from the table above. It will be understood that all three of the chosen F1, F2, and F3 polynucleotide sequences will be found in the same nucleic acid molecule.

The inventions are distinct, each from the other because of the following reasons:

The proteins of Inventions 1-45 are patentably distinct because the claimed zinc fingers differ in structure and in function, ie, binding to different S target sites. Therefore, the proteins of

Art Unit: 1653

Inventions 1-45 are patentably distinct one from the other. Note that this is not a species election.

The nucleic acids of Inventions 46-90 are patentably distinct because the claimed nucleic acids encoding the zinc fingers differ in structure and in function, ie, the zinc finders bind to different S target sites. Therefore, the nucleic acids of Inventions 46-90 are patentably distinct one from the other. Note that this is not a species election.

The nucleic acids of Invention 46-90 are related to the protein of Invention 1-45, respectively, by virtue of encoding same. The DNA molecule has utility for the recombinant production of the protein in a host cell, as recited in the Claims of Invention I. Although the DNA molecule and protein are related since the DNA encodes the specifically claimed protein, they are distinct inventions because the protein product can be made by another and materially different process, such as by synthetic peptide synthesis or purification from the natural source. Further, the DNA may be used for processes other than the production of the protein, such as nucleic acid hybridization assay.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

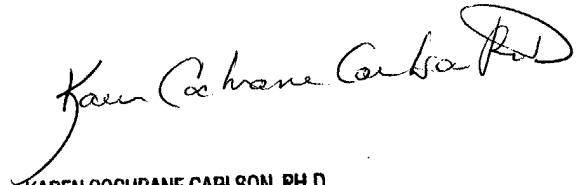
Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Art Unit: 1653

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen Cochrane Carlson, Ph.D. whose telephone number is 703-308-0034. The examiner can normally be reached on 7:00 AM - 4:00 PM, off alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Christopher Low can be reached on 703-308-2329. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.

  
KAREN COCHRANE CARLSON, PH.D.  
PRIMARY EXAMINER